155mm PROJECTILE

105mm PROJECTILE

4.2-inch MORTAR ROUND

U.S. ARMY PUEBLO CHEMICAL DEPOT

The depot was constructed in 1942 for the purpose of storing and servicing ammunition. In the early 1950s, the depot's mission expanded to include the storage of mustard agent-filled munitions, which were produced at the Rocky Mountain Arsenal in Denver, Colorado.

Today, the depot's primary mission is to safely secure, store and monitor the chemical stockpile while protecting the workforce, public and environment.

FOR MORE INFORMATION:

Pueblo Chemical Stockpile Outreach Office

(719) 546-0400

104 W. B St.
Pueblo, Colorado 81003
8:30 a.m. – 5 p.m., Monday – Friday
(Closed federal holidays)
PuebloOutreach@iem.com

Pueblo Chemical Agent-Destruction Pilot Plant Public Affairs
(719) 549-4959

U.S. Army Pueblo Chemical Depot Public Affairs
(719) 549-4135

Bechtel Pueblo Team Communications
(719) 549-5280

www.peoacwa.army.mil

PCAPP

Pueblo Chemical Agent-Destruction Pilot Plant

Destroying the Chemical Weapons Stockpile in Colorado

Projectiles are fed into an electrically heated detonation chamber.

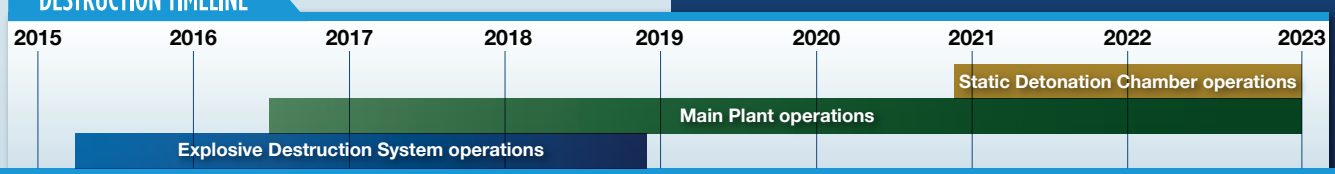
OVERVIEW

The mission of the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) is to destroy the stockpile of chemical weapons stored at the U.S. Army Pueblo Chemical Depot in Pueblo, Colorado.

The Department of Defense's Program Executive Office, Assembled Chemical Weapons Alternatives (PEO ACWA) is responsible for safely destroying the depot's mustard agent-filled munitions, thereby eliminating the risk associated with continued storage.

The safety of the workforce, neighboring communities and the environment is the program's top priority.

DESTRUCTION TIMELINE



PRIMARY DESTRUCTION TECHNOLOGY

Neutralization followed by biotreatment is the primary destruction technology chosen to destroy the depot's chemical weapons. There are five primary processing steps, as outlined below:

1. **REMOVING THE ENERGETICS** – Robotic equipment removes energetics (explosives) from the weapon.

2. **REMOVING THE MUSTARD AGENT** – The inside of the weapon is remotely accessed, and mustard agent is washed out using high-pressure water.

3. **NEUTRALIZATION OF AGENT** – The mustard agent is mixed with hot water and a caustic solution. The resulting product is called hydrolysate.

4. **BIOTREATMENT** – The hydrolysate is treated with microbes that break down the solution into water and biosludge.

5. **DISPOSING OF THE METAL PARTS** – Metal parts are heated to 1,000 degrees Fahrenheit for 15 minutes and then recycled.

STATIC DETONATION CHAMBER

Some projectiles cannot be easily processed by the plant's automated equipment. Explosive Destruction Technology will help the main plant destroy the mustard agent stockpile using three Static Detonation Chambers. The SDC uses electrically generated high temperature heat to detonate or deflagrate the projectiles. The mustard agent and energetics are destroyed by thermal decomposition. Off-gases are treated by an air-pollution equipment system.

BECHTEL PUEBLO TEAM – In September 2002, the Bechtel Pueblo Team was chosen as the systems contractor to design, construct, systemize, test, operate and close PCAPP. The team consists of Bechtel, Amentum, Battelle and GP Strategies.

ENVIRONMENTAL COMPLIANCE – The Pueblo team works closely with the Colorado Department of Public Health and Environment and other regulatory agencies to ensure compliance with all applicable laws, including the Resource Conservation and Recovery Act.

Environmental activities include recycling water used in the plant and ensuring biosludge, noncontaminated energetics and metal parts are shipped to offsite permitted treatment, storage and disposal facilities.